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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,451	01/02/2002	M. Nabeel Tarabishy	201-0475FMAC	6295

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EXAMINER

TORRES, MELANIE

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/683,451

Applicant(s)

TARABISHY ET AL.

Examiner

Melanie Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,8,10,11,14,15 and 17 is/are rejected.
- 7) ☒ Claim(s) 3,6,9,12,13,16 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed January 29, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered except where indicated.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The copy received by the Office appears to have been cut-off during duplication or submission and portions of the text are missing including the dates of execution by the inventors.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 12b. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 32, 34, 36, 38 in Fig. 2. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 10, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weigert et al. in view of Kawada.

Re claims 1, 10 and 17, Weigert et al. discloses a braking apparatus comprising a brake pedal (12) operative to reduce vehicle speed and coupled to a brake position sensor (32), the brake position sensor being operative to generate a brake position signal, a brake pedal actuator (14) coupled to the brake pedal and operative to generate a variable brake feel force to the brake pedal and a controller coupled to the brake pedal actuator (14) operable to receive the brake position signal, and a controller (16) including control logic operative to modify the variable brake feel force in proportion to

the brake position signal and wherein such a system is capable of use with a forward detection apparatus. (Column 2, line 67-Column 3 line 5, Column 3, lines 8-21)

However, Weigert et al. does not teach a forward detection apparatus operative to detect vehicle distance and relative vehicle speed and generate a vehicle distance signal and a relative vehicle speed signal and a controller operative to receive the vehicle distance signal and the vehicle speed signal, the controller including control logic operative to modify the variable brake feel force, the vehicle distance signal and the vehicle speed signal. Kawada teaches teach a forward detection apparatus (2) operative to detect vehicle distance and relative vehicle speed and generate a vehicle distance signal and a relative vehicle speed signal and a controller (7) operative to receive the vehicle distance signal and the vehicle speed signal, the controller including control logic operative to modify the variable brake feel force, the vehicle distance signal and the vehicle speed signal. Each of the variable brake feel force, the vehicle distance signal and vehicle speed signal being inherently modified upon implementation of brake controlling signal V_b . It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the brake feel force system of Weigert et al. to the distance and speed responsive braking system of Kawada so as to provide collision detection in a brake-by-wire system.

Re claims 2 and 11, Weigert et al. as modified teaches wherein the variable brake feel force is reduced in proportion to the brake position signal, the vehicle distance signal and the vehicle speed signal. (Column 2, line 66 – Column 3, line 5)

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weigert et al. in view of Kawada as applied to claim 1 above, and further in view of Paul et al.

Re claims 4, and 5, Weigert et al. as modified above does not teach a visible warning apparatus coupled to and controlled by a controller wherein the visible warning apparatus emits a visible signal having a variable color and variable intensity. Paul et al. teaches a visible warning apparatus (Fig. 1) coupled to and controlled by a controller wherein the visible warning apparatus emits a visible signal having a variable color and variable intensity. (Column 1, line 59 – Column 2, line 19) Further, Paul et al. teaches an audible warning apparatus coupled to and controlled by a controller. (Column 1, line 61-67) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have had a visual or audible warning in the braking system of Weigert et al. as modified to alert the driver of a possible collision in order to take evasive action.

8. Claims 7, 8, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weigert et al. in view of Kawada as applied to claim 1 above, and further in view of Michael

Re claims 7 and 14, Weigert et al. as modified above does not teach an audible warning apparatus coupled to and controlled by a controller. Michael teaches an audible warning apparatus coupled to and controlled by a controller. (Column 4, lines

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49-54) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the warning device of Michael in the braking device of Weigert et al. so as to warn other drivers of a possible collision.

Re claims 8 and 15, Weigert et al. in view of Kawada and Michael as modified above teaches wherein the audible warning apparatus emits an audible signal having a variable frequency or a variable volume. (Column 4, lines 49-54) However, Weigert et al. as modified does not teach wherein the audible warning apparatus emits an audible signal having both a variable frequency and a variable volume. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included redundant warnings in order to increase the chances of alerting the maximum number of drivers and nearby vehicles of the possible unsafe driving condition.

Allowable Subject Matter

9. Claims 3, 6, 9, 12, 13, 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Nishikawa et al. teach control logic operative to modify variable throttle feel force in proportion to vehicle distance and vehicle speed. Tamura et al. teaches a braking apparatus including a controller coupled to the brake pedal actuator operative to receive a brake position signal, a vehicle distance signal and a vehicle speed signal. Lubbers teaches a braking apparatus comprising a controller including control logic operative to modify the variable brake feel force in proportion to a brake position signal. Bullinger et al., Bond, III et al. and Butsuen et al. teach braking systems comprising forward detection apparatus operative to receive a brake position signal.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-2571 for regular communications and (703)308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

MT
May 7, 2003


MELANIE TORRES
PATENT EXAMINER
5-6-03